

Recombinant human Biliverdin Reductase A/BLVRA protein

Catalog Number: ATGP0377

PRODUCT INFORMATION

Expression system

E.coli

Domain

3-296aa

UniProt No.

P53004

NCBI Accession No.

NP_000703

Alternative Names

Biliverdin reductase A, BLVR, BVR, BVRA, BLVRA, Biliverdin reductase A Biliverdin IX alpha reductase, BLVR A, BVR A, Zinc metalloprotein.

PRODUCT SPECIFICATION

Molecular Weight

33.3 kDa (295aa) confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will appear higher)

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Specific activity is > 450pmol/min/ug, and is defined as the amount of enzyme that catalyze the reduction 1.0pmole of biliverdin of NADPH per minute at pH 8.8 at 25C.

Tag

Non-Tagged

Application

Enzyme Activity, SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

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BACKGROUND

Description

BLVRA, also known as biliverdin reductase A, belongs to the gfo/idh/mocA family. This protein is an enzyme that converts biliverdin to bilirubin, converting a double-bond between the second and third pyrrole ring into a single-bond. (Bilirubin + NAD (P) + = biliverdin + NAD (P) H) Recombinant BLVRA protein was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

MAEPERKFGV VVGVGRAGS VRMRDLRNPH PSSAFLNLIG FVSRRELGSI DGVQQISLED ALSSQEVEVA YICSESSSHE
DYIRQFLNAG KHVLEVPMT LSLAAAQELW ELAEQKGVKVL HEEHVLLME EFAFLKKEVV GKDLLKGSLL FTAGPLEEER
FGFPAFSGIS RLTWLVSLFG ELSLVSATLE ERKEDQYMKM TVCLETEKKS PLSWIEEKGP GLKRNRYSF HFKSGSLENV
PNVGVNKNIF LKQDNIFVQK LLGQFSEKEL AAEKKRILHC LGLAEEIQKY CCSRK

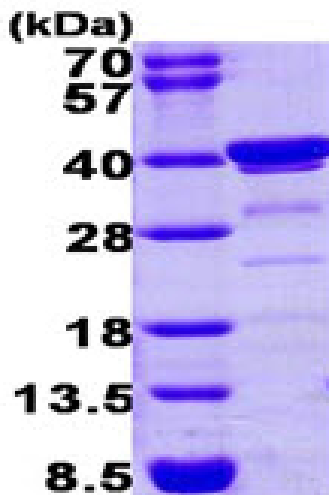
General References

Kravets A., et al. (2004) J Biol Chem. 279(19):19916-23.

Franklin E., et al. (2007) Biochem J. 405(1):61-7.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)